

U.S.S.N. 09/435,461  
Page 4

REMARKS

Claims 1, 6, 7, 10-13, 18 and 21-23 are pending. Claims 1, 12, 21 and 23 are amended. Amended independent claims 1, 12, 21 and 23 now require at least a 10% (claims 1 and 12) or 50% (claims 21 and 23) greater absorbance in both the UV and MB assays.

As described in the specification, polyesterase hydrolyses the long chain polymer PET to produce fragments which are detectable by UV and MB assays. Table 1 of the specification demonstrates that known DET (the same as ETE) and BEB assays result in the detection of many enzymes that hydrolyse mono and di-esters. However, Table I further shows that it is rare for any of those same identified enzymes to have the ability to hydrolyse PET.

Applicants' claims are drawn to those rare enzymes that have the ability to hydrolyse PET as shown by at least a 10% (claims 1 and 12) or 50% (claims 21 and 23) greater absorbance in both the UV and MB assays which are not described in the prior art.

Applicants wish to call the Examiner's attention to a divisional application filed simultaneously with this RCE application, the divisional application having claims directed to the UV and MB assays. The divisional application is filed in response to the Examiner's statements in a telephone interview on August 30, 2002, that it was not quite clear whether the claims were to methods using novel polyesterase enzymes or to methods for conduction novel assays used to characterize such enzymes. A restriction requirement dated 6/16/00 resulted in an election of claims that are drawn to methods of modifying polyester by using a polyesterase enzyme that is defined by its reactions obtained in the UV and MB assays. The Examiner stated that perhaps the claims should be to the assays. While Applicants contend that the claims distinguish over the prior

U.S.S.N. 09/435,461  
Page 5

art previously cited, and that it is proper to define polyesterase enzymes in terms of reactions obtained in described assays, nevertheless, Applicants have requested suspension of prosecution of this application in view of the divisional application.

Respectfully submitted,

Date:

9/4/02

  
Janet Kaiser Castaneda  
Registration No. 33,228

Genencor International, Inc.  
925 Page Mill Road  
Palo Alto, CA 94304  
Phone: (650) 846-4072  
FAX: (650) 845-6504

GC593 amendment

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U.S.S.N. 09/435,461  
Page 6

MARKED UP COPY OF THE CHANGES MADE

1. (Four times amended) A method for modifying the surface of an aromatic polyester resin, film, fiber, yarn or fabric comprising treating said polyester with a polyesterase enzyme which, in a UV and[/or] a MB assay having [a] controls without the polyesterase enzyme, produces at least a 10% greater absorbance than an absorbance of the control, the treatment occurring prior to the application of a finish and for a time and under conditions to modify the properties of said polyester, wherein said modified properties of said treated polyester are selected from the group consisting of pilling, pilling prevention, weight, feel, appearance and luster properties of said polyester.

6. (Three times amended) The method according to claim 1, wherein said polyesterase has at least 50% greater absorbance than an absorbance of a control without the polyesterase enzyme in a UV and[/or] a MB assay.

7.(Four times amended) The method according to claim 6, wherein said polyesterase has at least 100% greater absorbance than an absorbance of a control without polyesterase enzyme in a UV and[/or] a MB assay.

12. (Three times amended) A method for modifying the textile characteristics of a polyester article prior to the application of a finish to the article, comprising the steps of:

(a) obtaining a polyesterase enzyme, wherein said polyesterase enzyme has at least 10% greater absorbance than an absorbance of a control without polyesterase enzyme in an [assay selected from a] UV assay [or] and a MB assay;

(b) contacting said polyesterase enzyme with said polyester article under conditions and for a time suitable for said polyesterase to produce a modified polyester article; and

(c) producing a modified polyester article.

21. (Twice amended) . A method for enzymatically modifying the characteristics of a unsoiled aromatic polyester textile comprising; treating said polyester, prior to the application of a finish, with a polyesterase enzyme which produces in a UV and[or] a MB assay at least a 50% greater absorbance than an absorbance of a control without the polyesterase enzyme, the treatment for a time and under conditions to modify the textile properties of said polyester,

GC593 amendment

U.S.S.N. 09/435,461

Page 7

wherein said modified textile properties of the treated polyester comprise the pilling, pilling prevention, weight, feel, appearance or luster properties of said polyester.

23. (Twice amended) A method for modifying the surface of an aromatic polyester resin, film, fiber, yarn or fabric comprising, (a) contacting said polyester, prior to the application of a finish, with a polyesterase enzyme which produces in a UV and[or] a MB assay at least a 50% greater absorbance than an absorbance of a control without the polyesterase enzyme, the treatment for a time and under conditions to modify the textile properties of said polyester, wherein said modified textile properties of the treated polyester comprise the pilling, pilling prevention, weight, feel, appearance or luster properties of said polyester.